

WHAT IS CLAIMED IS:

1. A method of enhanced common channel monitoring in a wireless communication system comprising:

monitoring common channels during an idle state to obtain location information linked to infrastructure element identification;

storing said location information in a database; and
accessing said database to determine location information related to non serving base stations.

2. The method of Claim 1, further comprising accessing said database during an active state to determine location information related to serving base stations that is not sent during the active state.

3. The method of Claim 1, further comprising monitoring a common channel from a serving base station during an active state.

4. The method of Claim 1, further comprising monitoring the common channels for a pre-determined period of time prior to an assigned slot.

5. The method of Claim 1, further comprising monitoring the common channels after an assigned slot.

6. The method of Claim 1, further comprising monitoring new common channels only during the idle state.

7. A method for monitoring and collecting location-related information and identification information from a wireless network comprising:

monitoring a common channel transmitted from a serving sector during an assigned time slot to obtain location information linked to infrastructure element identification; and

monitoring one or more common channels transmitted by one or more non-serving sectors while not in the assigned time slot to obtain location information linked to infrastructure element identification.

8. The method of Claim 7, further comprising ignoring communication failures when receiving an unreliable channel while monitoring the one or more common channels transmitted by non-serving sectors.

9. The method of Claim 8, further comprising disabling a forward fade timer to ignore communication failures.

10. The method of Claim 7, further comprising monitoring the common channels for a pre-determined period of time prior to the assigned time slot.

11. The method of Claim 7, further comprising monitoring the common channels after the assigned time slot.

12. The method of Claim 7, further comprising storing location information contained in the common channels in a database.

13. The method of Claim 12, further comprising accessing the database to determine location information of the non-serving sectors.

14. The method of Claim 12, further comprising accessing the database during the assigned time slot to determine location information related to the serving sector.

15. A method of monitoring overheads from non-serving sectors comprising:

suspending or disabling the fade timer for non-serving sector channels;

monitoring a common channel during an idle state to obtain location information; and

entering a standby mode until a next assigned slot.

16. The method of Claim 15, further comprising monitoring the common channels for a pre-determined period of time prior to the assigned slot.

17. The method of Claim 15, further comprising monitoring the common channels after the assigned slot.

18. The method of Claim 15, further comprising storing location information contained in the common channels in a database.

19. The method of Claim 18, further comprising accessing the database to determine location information of the non-serving sectors.

20. A method of monitoring overhead information from non-serving sectors comprising:

waking up a designated period of time earlier than an assigned slot to monitor a common channel transmitted by a non-serving sector to obtain location information; and monitoring additional common channels transmitted by other non-serving sectors as time permits before the next assigned slot.

21. The method of Claim 20, further comprising applying the location information obtained during said non-serving sector monitoring for common channel re-acquisition when acquisition of the serving sector fails during slotted-mode operation.

22. The method of Claim 20, further comprising storing the location information obtained from the common channels in a database.

23. The method of Claim 22, further comprising accessing the database to determine location information of the non-serving sectors.

24. A wireless communication system comprising:

a serving base station and one or more non serving base stations which transmit common channels containing location information linked to an infrastructure element identification; and

one or more mobile stations which monitor the common channels during an idle state to obtain the location information linked to an infrastructure element identification, wherein the one or more mobile stations store the location information linked to an infrastructure element identification in a database and access the database to determine location information related to one of the one or more non serving base stations.

25. The wireless communication system of Claim 24, wherein the one or more mobile stations accesses the database during an active state to determine location information related to the serving base station that is not sent during the active state.

26. The wireless communication system of Claim 24, wherein the one or more mobile stations monitors a common channel from the serving base station during an active state.

27. The wireless communication system of Claim 24, wherein the one or more mobile stations monitors the common channels for a pre-determined period of time prior to an assigned slot.

28. The wireless communication system of Claim 24, wherein the one or more mobile stations monitors the common channels after an assigned slot.

29. The wireless communication system of Claim 24, wherein the one or more mobile stations monitor new common channels only during the idle state.

30. A mobile station for obtaining location information in a network, the network containing a serving base station and one or more non-serving base stations which transmit common channels containing location information linked to an infrastructure element identification, the mobile station comprising:

a database; and

a mobile station processor programmed for monitoring the common channels during an idle state to obtain the location information linked to an infrastructure element identification, and storing the location information linked to an infrastructure element identification in the database and accessing the database to determine location information related to one of the one or more non-serving base stations.

31. The mobile station of Claim 30, wherein the mobile station processor is further programmed for accessing the database during an active state to determine location

information related to the serving base station that is not sent during the active state.

32. The mobile station of Claim 30, wherein the mobile station processor is further programmed for monitoring a common channel from the serving base station during an active state.

33. The mobile station of Claim 30, wherein the mobile station processor is further programmed for monitoring the common channels for a pre-determined period of time prior to an assigned slot.

34. The mobile station of Claim 30, wherein the mobile station processor is further programmed for monitoring the common channels after an assigned slot.

35. The mobile station of Claim 30, wherein the mobile station processor is further programmed for monitoring new common channels only during the idle state.